

REMARKS

The Office Action dated August 12, 2004, has been received and carefully noted. The above amendments and the following remarks are submitted as a full and complete response thereto.

By this Amendment, new claims 5 and 6 have been added. Claims 1 and 4 have been amended. The amendments to claim 1 can be found in Fig. 5, and on page 9 lines 3-11, and page 12 lines 3-8 of the specification as originally filed. Claims 1-6 are therefore pending and respectfully submitted for consideration.

The Applicants wish to thank the Examiner for indicating allowable subject matter in claim 4. Claim 4 was rewritten in independent form to include the limitations of claim 1. New claim 5 includes the limitations of claims 3 and 4.

Claims 1-3 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hale (U.S. Patent No. 4,082,068). Claim 2 depends from claim 1. To the extent that the rejection is applicable to the claims currently pending, the Applicants traverse the rejection and respectfully submit that claims 1-3 recite subject matter that is neither disclosed nor suggested by Hale.

In Fig. 1, Hale discloses an internal combustion engine for an outboard motor that includes a cooling passageway extended upwardly through the central core and discharged into a chamber in an exhaust manifold cover between the cylinder banks. The water passes through the cover and to the lateral side edges which have inlets to cooling chambers about the opposite cylinder banks which are continuous and discharge at the uppermost end, as shown in Fig. 1. The cylinder heads have a cooling chamber with top inlet aligned with the cylinder discharge. The cooling water flows

downwardly, as shown in Fig. 2, to a common discharge header at the lower end for both of the cylinder banks. A pressure relief valve discharges the water from the common header. A separate thermostatic valve is secured to the uppermost end of each of the cylinder banks at the transfer connection from the cylinder cooling chamber to the head cooling chamber and thus at the uppermost and highest point in the two banks.

With respect to claim 1, the Applicants submit that Hale fails to disclose or suggest the claimed features of the invention. Claim 1, as amended, recites a further water outlet is provided in the exhaust manifold cooling water jacket, the water outlet and the further water outlet being provided around a portion of the exhaust manifold extending in the longitudinal direction of the outboard motor such that one of the water outlets is in front of the other of the water outlets in the longitudinal direction. The Applicants submit that Hale does not disclose or suggest at least a further water outlet provided in an exhaust manifold cooling water jacket, or the water outlet and the further water outlet being provided around a portion of the exhaust manifold extending in the longitudinal direction of the outboard motor such that one of the water outlets is in front of the other of the water outlets in the longitudinal direction as claimed in claim 1. Therefore, Hale fails to disclose or suggest each and every feature of the invention as recited in claim 1.

New claim 6 also recites a further water outlet is provided in the exhaust manifold cooling water jacket, the water outlet and the further water outlet being provided around a portion of the exhaust manifold extending in the longitudinal direction of the outboard motor such that one of the water outlets is in front of the other of the water outlets in the

longitudinal direction. Thus, for similar reasons as discussed above with respect to claim 1, the Applicants submit that Hale does not disclose or suggest the features of the invention as recited in new claim 6.

Claim 2 depends from claim 1. In view of the above, Hale also fails to disclose or suggest each and every feature of the invention as recited in claim 2.

With respect to claim 3, the Applicants submit that Hale fails to disclose or suggest at least the combination of a water outlet provided in the highest part of the exhaust manifold cooling water jacket and a flow rate control means for controlling the flow rate of the cooling water provided in the combustion chamber cooling water jacket. The Office Action took the position that the thermostat valve 23 was comparable to the flow rate control means recited in claim 3. However, Hale discloses that the thermostat valve 23 is connected over the uppermost end of cylinder bank 5. In FIG. 1, the thermostat valve 23 is shown as being connected to the upper portion of the cooling system, to the very highest point in the individual cooling passageway of the cylinder bank 5. As such, the thermostat valve 23 is not provided in any element comparable to the combustion chamber cooling water jacket. As such Hale does not disclose or suggest at least the combination of a water outlet provided in the highest part of the exhaust manifold cooling water jacket and a flow rate control means and combustion chamber cooling water jacket, as recited in claim 3.

According to U.S. patent practice, a reference must teach every element of a claim in order to properly anticipate the claim under 35 U.S.C. §102. In addition, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal

Bros. v. Union Oil Co. of California, 814 F.2d 628,631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "Every element of the claimed invention must be arranged as in the claim. . . the identical invention, specifically, [t]he identical invention must be shown in as complete detail as contained in the claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989) (emphasis added). Accordingly, Hale does not disclose or suggest the water-cooled engine as claimed and arranged in claims 1-3. Therefore, Hale does not anticipate claims 1-3, nor are claims 1-3 obvious in view of Hale.

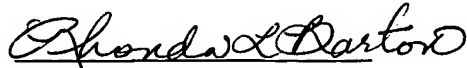
As noted above, claim 4 was indicated as containing allowable subject matter and has been rewritten in independent form to include the limitations of claim 1. New claim 5 includes the limitations of claims 3 and 4. Claim 2 depends from claim 1. The Applicants respectfully submit that this dependent claim is allowable at least because of its dependency from allowable base claim 1. In view of the above, the Applicants submit that claims 1-6 recite allowable subject matter. Accordingly, the Applicants respectfully request allowance of claims 1-6 and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper,

may be charged to counsel's Deposit Account No. 01-2300, **referencing Attorney Dkt. No. 107348-00371.**

Respectfully submitted,

A handwritten signature in cursive script, reading "Rhonda L. Barton".

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